

WORLD NEUROLOGY

THE OFFICIAL NEWSLETTER OF THE WORLD FEDERATION OF NEUROLOGY

World Congress of Neurology: Vienna in September

BY DONNA BERGEN, MD

The 21st **World Congress of Neurology** (WCN 2013) will be held Sept. 21-26 in Vienna, in conjunction with the European Federation of Neurological Societies and the Austrian Society of Neurology. The theme of the congress will be Neurology in the Age of Globalization.

The first World Congress in Vienna was the eighth in 1965, with Sir Gordon Holmes among the honorary presidents. The president was Hans Hoff, the vice president was Franz Seifelberger, the scientific secretary was Helmut Tschabitscher and the general secretary was Franz Gerstenbrandt, who also will take part in the 21st World Congress of Neurology. The president of the World Congress of Neurology Vienna 2013 is Professor Eduard Auff, from the Austrian Neurological Society.

The World Congress of Neurology in Vienna is likely to be particularly well attended, since both the European Federation of Neurological Societies (EFNS) and the Austrian Neurological Society have agreed to combine their annual meetings with the World Congress of Neurology. The broad activities and vision of the upcoming WFN Congress will help to shape the future of neurology in the age of globalization.

The congress reflects the global membership of the World Federation of Neurology, its member societies representing neurologists from 113 countries. This congress, as others, will represent the scientific and clinical interests of neuroscientists around the world, with a special emphasis on European and Austrian neurology. Highlights include a plenary lecture by Nobel prize winner Eric Kandel, whose recent book, "The Age of Insight," explores the neural phenomena behind the artistic innovations of Viennese painters Egon Schiele and Gustav Klimt, and the theories of the subconscious of Sigmund Freud, who was also Viennese.

Over the past several years, the WFN and other global neuroscience organizations have begun joint discussions and projects designed to provide a strong voice for the promotion of brain health



Plan your travel now to Vienna in the fall for World Congress of Neurology Sept. 21-26, 2013.

worldwide. The Scientific and Educational courses of WCN2013 will include contributions by the World Federation of Neurosurgical Societies and the World Psychiatric Associations, on subjects of interest to neurologists. Many subspecialty

neurology societies will also be represented on the program.

Spend time with the **WCN2013** program to learn more about the congress session and to plan your travel and accommodations. •

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Early Neurological Films at Medical Congresses

BY PETER J. KOEHLER

During the past decade, historical neurological films gained popularity in the neurological community. Early films made by neuroscientists have surfaced in several cities, including Leuven (Van Gehuchten), Paris (Paul Sainton), Berlin (Paul Schuster and Arthur Simons), Bucharest (Georges Marinesco), Philadelphia (Theodore Weisenburg), Boston (Denny-Brown),

Turin (Camillo Negro), Bologna (Vincenzo Neri), London (S.A. Kinnier Wilson), Utrecht (Magnus) and Leiden (Rade-maker).

The educational program of the American Academy of Neurology meetings included a session on archival neurological films for years. In fact, the use of cinematography for medical purposes started soon after the Lumière brothers demonstrated their first film for paying audience

in 1895, the same year that Wilhelm Conrad Röntgen discovered X-rays. However, it also was accompanied by a scandal, when films made by the Paris surgeon Eugène Louis Doyen were illegally sold by his cameramen and shown at fairs and coffee houses. Not everyone realizes that neurology took interest in photography and photochronography for recording gait and movement disorder

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FROM THE EDITOR-IN-CHIEF

Advancing Our Goals

How can we help individuals with neurological problems obtain the best possible care in every country? The World Federation of Neurology, representing about 27,000 neurologists from 113 countries, plays a potentially critical role in this effort. Through its officers, 15 committees and over 20 working groups, the WFN seeks to educate, advocate and support research and clinical care in many parts of the world. A particular focus is to bring improved services to areas that are under-resourced.



DONALD H.
SILBERBERG

A major function of the World Congress of Neurology, which is held every other year, is to work toward these goals, not only by formal presentations, but by the informal contacts that lead to collaborative work. Appropriately, a major theme this year will be "Making the Case for Neurology," addressing how neurologists can influence public policy toward these aims. See story on page 1 for more information about the World Congress 2013.

A New Force

A truly promising development is the entry of our most recent trainees who can play a unique role. They are networking intensively around the globe, taking full advantage of electronic communication, developing exchanges and building bridges that were so difficult to do just a few years ago. The reports in this issue — "Neurology International Residents Videoconference and Exchange: A Tale of Five Continents," by Mary Jane Lim Fat and colleagues, and the report from The International Working Group of Young Neurologists and Trainees (IWGYNT) — are excellent examples of what is happening and what is possible.

Their increasing involvement and potential leadership is most welcome.

As they move into residency training and begin to provide neurological services, many seek opportunities to contribute to education, research and clinical care beyond their own countries. This will lead to increased sharing of information, experiences and ways to improve care.

Part of this groundswell is networking that is taking place among residents and fellows in order to share and develop opportunities abroad. In its next issue, *World*

A truly promising development is the entry of our most recent trainees who can play a unique role.

Neurology will publish the description of a developing network in the United States. Readers will want to see descriptions of similar developments in their countries. I invite those involved to send me their accounts.

An Invitation to All Readers

Your descriptions of neurologic education, services, needs or relevant history in your country or region may be interesting to your colleagues in many other countries. I welcome notes or articles; please send them to me at silberbe@mail.med.upenn.edu.

Also, recent articles of interest are sometimes published in journals that are not indexed internationally, or may otherwise escape notice. Please send me

citations that you think should be seen by readers of *World Neurology*.

I look forward to meeting you in September in Vienna and to discussing the ways in which we can work together to advance these goals. •

IN MEMORIAM

Eli S. Goldensohn

BY DONALD SILBERBERG, MD

Eli S. Goldensohn, a pioneer in the development of video-EEG monitoring, passed away March 22, 2013, at the age of 97.



During his long career, he was on the faculties of the University of Colorado, University of Pennsylvania School of Medicine, the College of Physicians & Surgeons at Columbia University, and after retiring from Columbia, he spent more than a decade at the Albert Einstein College of Medicine.

Trained as a neurophysiologist, he was recruited into neurology by G. Milton Shy during their Colorado days. Shy later brought him to the University of Pennsyl-

vania. During his years in Philadelphia (1962-1967), I greatly valued Goldensohn's friendship and his gentle but expert guidance for a newly minted member of the Penn faculty. His understanding of clinical epilepsy was amazingly complete, ranging from concepts of causation to the best possible treatments for individuals with epilepsy.

It was during those years that he pioneered the development of video-EEG monitoring at a time when the available equipment was rudimentary. Goldensohn carried out key laboratory studies to understand the pathophysiology of the epileptic focus in animals, and from that the possible substrates of an epileptic discharge in patients. He was doing "translational research" before the term was invented. His warmth and modesty were inspiring. He never lost those qualities.

As he supervised many residents and epilepsy fellows, he consistently emphasized the importance of interpreting EEGs based on underlying physiological mechanisms rather than relying on pattern recognition alone, which was the general approach at the time. During his career, Goldensohn had a major impact on many clinicians and scientists, transmitting

both his enthusiasm and knowledge.

His efforts were invaluable for people with epilepsy in every country. He was delighted to accept invitations to visit former trainees in many countries, including Belgium, Peru and Taiwan. Goldensohn served as president of the American Clinical Neurophysiology Society, American EEG Society, the Eastern EEG Society and of the American Epilepsy Society and chair of the Professional Advisory Board of the Epilepsy Foundation of America. The AES William G. Lennox Award was among his many honors.

Goldensohn was particularly proud of having assembled and published his late brother Leon Goldensohn's interviews of Nazi defendants and witnesses at the Nuremberg Trials ("The Nuremberg Interviews," 2004, Knopf).

Goldensohn will be sorely missed by his many friends and colleagues, and most of all by his loving family, Betty, his wife of 75 years, his children Ellen and Marty, his grandchildren, Ben, Sasha, Rosie and Emma, and two great-grandchildren, Sophie and Theo. Eli and Betty's son Richard died in 1985. •



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Dr. Donald H. Silberberg

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WORLD NEUROLOGY

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FROM THE PRESIDENT

JNS: New Editor, New Face, New Content

The *Journal of Neurological Sciences (JNS)* is the official journal of the World Federation of Neurology (WFN). Under the leadership of Robert Lisak and his team, the journal has grown steadily in its impact factor, circulation and income for the WFN. We are most grateful to Lisak, his team and his indispensable manager, Susan Hutton, for their dedication and accomplishments.



VLADIMIR
HACHINSKI

The Publications Committee of the WFN under the chairmanship of Professor Christopher Kennard after an extensive and thorough search, recommended to the WFN Trustees the appointment of John D. England, The Grace Benson professor of Neurology, professor

of Neuroscience and head of the Department of Neurology, Louisiana State University Health Sciences Center School of Medicine in New Orleans as the editor-in-chief beginning July 1, 2013. The trustees approved this selection enthusiastically.

England graduated in medicine from the West Virginia University School of Medicine. He did his residency in medicine and neurology at the Medical University of South Carolina followed by research and neuromuscular fellowships at the Hospital of the University of Pennsylvania. Subsequently, he held full-time faculty positions at the University of Colorado School of Medicine and the Louisiana State University Health Sciences Center School of Medicine in New Orleans, where he has been chair of the Department of Neurology since 2007.

In addition to his distinguished career as an investigator in neuromuscular disorders, he also has held many relevant editorial positions, including being an editorial consultant for several journals, a member of the editorial board of *Muscle and Nerve*

The journal will have a new face, i.e. cover, to reflect its expanding role and content. In addition to a distinguished international board, the journal will have six associate editors

and an associate editor of *Neurology and Clinical Neurophysiology*.

The journal will have a new face, i.e. cover, to reflect its expanding role and content. In addition to a distinguished international board, the journal will have six associate editors:

- **Carmel Armon**, chair, Department of Neurology, Assaf Harofeh Medical Center/Tel Aviv University Sackler Faculty of Medicine: *Best Practices*, a feature aimed at physicians doing neurological work in differently resourced settings.
- **Nicolas Bazan**, Boyd professor, Ernest

C. and Yvette C. Villere endowed chair of Retinal Degenerations, professor of Ophthalmology, Biochemistry, Molecular Biology and Neurology and director of the Neuroscience Center of Excellence at the Louisiana State University Health Sciences Center, New Orleans:

- **Basic and Translational Sciences**
- **Bruce Ovbiagele**, Admiral Paul E. Pihl endowed chair of Neurosciences, professor of Neurosciences and co-chair, Department of Neurosciences, Medical University of South Carolina: *Outcomes Research*
- **Donald Silberberg**, professor of Neurology, University of Pennsylvania School of Medicine and past senior associate dean for International Medical Programs: *World Neurology*. He is also the editor of *World Neurology*, our online news publication, which puts him in an ideal position to highlight contributions in the journal.
- **Daniel Truong**, director, The Parkinson's and Movement Disorder Institute, Fountain Valley, Calif.: *Reviews, Commentary and Editorials*.
- **Nicole Villemarette-Pittman**, assistant professor of Neurology, Louisiana State University Health Sciences Center School of Medicine in New Orleans: *Managing Editor in New Orleans*

We look forward to *JNS'* continuing growth in excellence, circulation and reach and its increasing role in addressing issues and offering solutions in global neurology. •

Mark Your Calendars

2013

Second SFCNS Congress: Swiss Federation of Clinical Neuro-Societies

June 5-7, 2013
Montreux, Switzerland
<http://kongress2.imk.ch/sfcns2013/>

Fifth Asian-Oceania Congress of Clinical Neurophysiology (5-AOCCN)

Aug. 28-31, 2013
Bali, Indonesia
<http://aoccnbali2013.com/>

XXI World Congress of Neurology

Sept. 21-26, 2013
Vienna
<http://www2.kenes.com/wcn/Pages/Home.aspx>

European Paediatric Neurological Society (EPNS) Congress

Sept. 25-28, 2013
Brussels
<http://www.epns2013.be/>

Congress of the European Committee for Treatment and Research in Multiple Sclerosis

Oct. 2-5, 2013
Copenhagen
<http://www.ectrims-congress.eu/>

XVI World Neurosonology Meeting

Oct. 17-20, 2013
Sofia, Bulgaria
<http://www.nsr2013.net/>

Third International Conference on Neurology and Epidemiology (ICNE 2013)

Nov. 21-23, 2013
Abu Dhabi, UAE
<http://www.icne2013.com>

Society of Neuro-Oncology Annual Meeting

Nov. 21-24, 2013
San Francisco, USA
<http://www.soc-neuro-onc.org/>

2014

Eighth Symposium on Neuroprotection and Neurorepair — 2014

April 9-12, 2014
Magdeburg, Germany
<http://www.neurorepair-2014.de/>

Alzheimer's Disease International Annual Conference 2014

May 1-4, 2014
San Juan, Puerto Rico
<http://www.adi2014.org/>

International Child Neurology Congress 2014

May 4-9, 2014
Ilgazu Falls, Brazil
<http://www.icnapedia.org/>

EFNS-ENS Joint Congress, Istanbul 2014

May 31-June 3, 2014
Istanbul
<http://www.efns.org/EFNS-ENS-Joint-Congress-Istanbul-2014.877.0.html>

Movement Disorder Society Annual Congress 2014

June 8-12, 2014
Stockholm
http://www.movementdisorders.org/congress/past_and_future.php

Congress of the European Committee for Treatment and Research in Multiple Sclerosis 2014

Sept. 10-13, 2014
Boston, USA
<http://www.ectrims.eu/conferences-and-meetings>

Ninth World Stroke Congress

Oct. 22-25, 2014
Istanbul
<http://www.world-stroke.org/meetings/world-stroke-congress>

WFN Headquarters Office is Moving

After five years in Richmond-upon-Thames, WFN Headquarters Office is relocating to new premises in London. The new address is in Hammersmith at 1 Lyric Square, London W6 0NB. The new telephone and fax numbers are:

- Telephone: +44 (0) 203 542 7857/7858
- Fax: +44 (0) 203 008 6161

All of the attractions and features of central London will remain at hand for any members and visitors, and the office is easily accessible to and from Heathrow Airport on the London underground via the Piccadilly Line. •

WFN Elections 2013: Nominating Committee Recommendations



Schonbrunn
Palace
in Vienna,
Austria.

Three officers and one trustee are to be elected at the Council of Delegates Annual General Meeting (AGM) in September during the World Congress of Neurology in Vienna. The nominating committee of the World Federation of Neurology now recommends to the membership those listed here as candidates in accordance with the Federation's Memorandum and Articles of Association.

Recommended candidates

President (to take office WEF, Jan. 1, 2014)

Werner Hacke, Germany
Raad Shakir, UK

Additional Candidate

Nominated under Article 6.3 of the constitution
(http://www.wfneurology.org/cache/downloads/9zf2tk7klb4k8ccsskgswo8/mem_ArticlesOfAssoc.pdf)

Gustavo C. Roman, USA

First Vice President

(to take office WEF, Jan. 1, 2014)

William Carroll, Australia
Ryuji Kaji, Japan

Secretary-Treasurer General

(to take office WEF, Jan. 1, 2015)

Stanley Fahn, USA
Wolfgang Grisold, Austria

One Elected Trustee

(to take office WEF, September 2013)

Donna Bergen, USA
Amadou Gallo Diop., Senegal
Marco Medina, Honduras
Ching Piao Tsai, Taiwan

Candidates' biographical details and statements of their goals and objectives for the organization are on pages 4-10

To nominate another individual:

- Obtain the supporting signatures of five or more authorized WFN delegates.
- Submit the name(s) of the individual(s) in question to the Secretary-Treasurer General, c/o the WFN headquarters office, by Aug. 15, 2013. •

CANDIDATE STATEMENT: PRESIDENT

Werner Hacke, MD, PhD, DSc (hon), FESC

Neurology is changing rapidly! The spectrum of neurological diseases is undergoing major changes in incidence, spectrum and therapeutic options. There is an increase of neurological diseases in an unprecedented manner all over the world. While infectious diseases are still a major health problem in low and middle income countries, all societies are facing a massive increase of noncommunicable diseases linked to risk factors and aging population.



Neurological services all over the world need to be expanded and health systems have to be prepared for the forthcoming challenges. We need to combine our efforts with our friends and colleagues in the World Brain Alliance, neurosurgeons, psychiatrists, neuroradiologists and child neurologists, to name a few, and our peers in the large neurology specialty societies. Together we can make a difference, and the WFN is the ideal partner for the WHO to lead these efforts.

Background

I was born in post-war Germany in 1948. I received my university training in both psychology and medicine from the RWTH (Technical University) Aachen, Germany. I took my neurology training at the Department of Neurology at the Aachen Medical School under the guidance and leadership of Professor

Klaus Poeck, a former vice president of the World Federation of Neurology. I also spend time in Bern, Switzerland, with Professor Marco Mummenthaler. In 1986-1987, I was a visiting professor at the Scripps Clinic and Research Foundation in La Jolla, San Diego, Calif. When I was 38 years old, I was elected chair of the Department of Neurology at the University of Heidelberg, a position that I have held since 1987. I have been on the editorial board of several neurology journals including the *Journal of Neurological Sciences* and European editor of the *Journal Stroke* for five years. In addition, to highlight the fact that I represent neurology beyond cerebrovascular diseases, I am the sole author of the leading German neurology textbook "Neurologie," now in its 13th edition, which I took over from my mentor Professor Klaus Poeck 12 years ago. This has kept me in close touch with general neurology.

Honors

- MD thesis at the Technical University in Aachen (Dr. med.)
- Master of Science in Psychology from the Technical University Aachen (Dipl.-Psych.)
- PhD in Neurology from the Technical University of Aachen
- President of the German Society of Neurology 2001-2003
- Doctor honoris causa from the Georgia State University (DSc (hon))
- Honorary Member of several international and national Neurology and Stroke Societies
- President of the European Stroke Organization (ESO) 2008-2010
- Honorary President of the European Stroke Organization (2012)
- Honorary Professor of the University of

Tbilisi, Georgia and of the Universidad los Andes, Santiago the Chile, Chile

International Activities

During the past 25 years, I have devoted much time to international teaching activities. Many delegates will know me from their national or regional neurology and stroke conferences, at which I have had the honor to speak. Under my leadership the Department of Neurology in Heidelberg has hosted more than 200 fellows and exchange scientists from all parts of the world, some of them now in leading positions in their home countries. As the chair of the conference Supervising Committees of both WFN and WSO, I have prepared the biannual sequence of the World Conferences of Neurology (WCN) and helped with the organization of the WCNs in Marrakesh and Vienna, and the World Stroke Conferences in Cape Town, Vienna, Seoul and Brazil.

WFN Activities

My first WFN activity was connected with the WCN 1985, when I was the assistant to the conference president for the Hamburg World Congress of Neurology.

Shortly thereafter, in 1987, I became the founding chair of the Research Group of Critical Care Neurology. I became an elected trustee of the WFN in 2006 and I was elected first vice president of WFN in 2009. I have served as the chair of the Conference Supervising Committee, and in this function, I was involved in the creation of the guidelines for conference site selection and bidding procedures. I am also chair of the Fundraising Committee of the WFN. I support the work of the Brain Alliance with the World Federation of Neurosurgery and Psychiatry and the International Brain Research Organization. I have started the Neurology Specialty Network in which we try to coordinate the activities of WFN and several large international specialty societies such as the World Stroke Organization, the Movement Disorders Society, the international league against epilepsy, child neurology and others.

My Main Objectives

Partnership and Education

I plan to further develop the cooperation with our sister societies and the specialty groups to improve and coordinate educational activities throughout the world, cooperate in conferences and projects, and make brain health and care for neurological diseases a high priority within the WHO and within the health systems of all our membership countries. I also wish to convince more colleagues to actively participate in WFN committees and tasks.

Research and Implementation

Neurological research is of highest quality. We must continue to support science, but we also need to facilitate translation high level of the new finding in clinical practice, knowing that differences in financial resources are a huge obstacle. The implementation of progress in diagnosis and therapy of neurological diseases has been suboptimal even in relatively rich societies. We need to improve our standard of care on all levels and in all societies. We have to continue research for better treatment, but we also have to make available cheap evidence-based approaches for our patients in countries, in which modern medicine can not yet be financed. Custom-made implementation of scientific progress may be achieved by exchange and teaching programs for scientists and physicians.

Advocacy and Public Awareness

We must raise the profile of neurology. Neurology and brain health has never received the attention in the public that it deserves. Considering the amount of funding and public interest that is given to cancer, AIDS and heart disease, we have a long way to go. I will strive to put neurology to the forefront of public awareness and convince decision makers all over that brain health is the most important one, and there is no decent human living without a healthy brain. •

CANDIDATE STATEMENT: PRESIDENT

Raad Shakir

The WFN has been part of my life for 32 years. It all started when I presented a paper at the 1981 World Congress in Kyoto. I soon realized that neurology is an international fraternity of like-minded people who strive to understand and advise each other. This was made more poignant as I was already an émigré from my own country of birth, Iraq. After finishing my undergraduate medical degree at Baghdad University, I headed to the U.K. to train in neurology. Thereafter I could not go back to Iraq because of war. Neurology came to my aid, and I went to work in neighboring Kuwait. At that time, a new medical school was being established, and I ended up as academic vice dean. After another war in the region, my family and I had to leave with few possessions. After a period of being jobless and stateless, we were fortunate to be able to come back to the U.K. This was only possible because of the WFN and my friends and colleagues. I am greatly indebted to Lord Walton, then-president of the WFN, for his support and that of many WFN colleagues from across the world who enabled me to re-establish my career as a neurologist.¹

I have been a WFN delegate since Hamburg 1985, a member of various committees (Education, Public Relations and Finance), and chair of a WFN Research Group (Tropical Neurology). I have been involved in the organization of four World Congresses (London, Bangkok, Marrakesh and Vienna). As secretary-treasurer general since January 2007, I was subsequently re-elected for a second and final term. I can say with confidence that I probably know the WFN intimately. At least I thought I did until I asked a close neurology friend for advice on whether I should run for president. The answer made me think hard and search deeply for a reply. The two questions posed were: Why is there a WFN, and can you really make a difference? They made me think hard, searching for a reply.

Why Is There a WFN? Does It Matter?

As we all know, international bodies have their admirers, beneficiaries and critics. I dare say the latter group is not insubstantial. To state the obvious, the WFN is a forum for all to see what is happening in their region and across the world. Neurologists meet, interact

and go home after meetings, having made friends and learned from others. They also present their experiences in neurological practice and research and create new ideas and relationships.

The WFN is necessary as a conduit for channeling activities whether scientific, clinical or therapeutic, as well as social interactions with like-minded individuals. Although one hears from various colleagues across the world about the overall value and usefulness of the WFN, when it comes to world congresses, there can be no doubt that every neurologist from all corners of the globe will endeavor to attend and present his or her work. Many from the more developed parts of the world feel privileged to be asked to speak in scientific sessions and teaching courses to impart their experiences to colleagues who may not have the same access to technological advances.

The WFN matters because it brings together national, regional and international organizations in an egalitarian and friendly manner. At the WCN, all participants feel they are part of a global umbrella organization, and this is what gives the meetings their importance and uniqueness, as this may not happen in national or regional meetings. During my tenure as WFN secretary-treasurer general, and coming from my background, I have always tried to make sure that the whole world is represented and actively interacting.

The role of the WFN as a representative of neurology in international forums is crucial. The WHO recently recognized neurology as a speciality, and it is now part of the section of mental health and noncommunicable diseases. This culminated, in 2009, in the formation of the Topic Advisory Group (TAG) on neurosciences to review ICD 10 and come up with ICD 11 in 2015. I am privileged to chair this group, which includes neurology and neurosurgery. With the help of many colleagues from across the world, this project is going well.

The WFN has donated a substantial grant to the project, and we have already made important changes in the way neurology is categorized in the WHO. As everyone knows, Ministries of Health report health statistics to the WHO. Stroke, the most devastating and common neurological condition, was classified under cardiovascular disease. With the efforts of many in the TAG, especially the World Stroke Organization, and with full agreement of our cardiology colleagues, the WHO has agreed to move stroke to neurology in ICD11.

All these activities would not have been possible without the WFN. So to answer the first question, yes the WFN does matter.

Can I Really Make a Difference?

This is a more difficult question. I just

have to look at the list of former WFN presidents to be humbled by the talent and achievements of each and every one of them. Can I do something different? After a lot of soul searching, I have decided that I can. My plan I think is simple. Global involvement through regional empowerment.

It has been my role to work with my trustee colleagues to try to involve as many neurologists as we can in various activities. We have sometimes succeeded, and at other times have not. If every neurological society is to have its say, the WFN must have the mechanisms to listen and fulfill as many of those wishes and requests as possible. Regional organizations are there to bridge the gap. They are at various stages of evolution, some are mature and very much involved, while others may not be at that level but are still trying their best to move ahead and may request WFN advice and guidance. One has to say that as much as the WFN thinks it represents the views of member societies, they are the ones who really know better and should be listened to.

If elected, it will be my goal to introduce a mechanism of organized devolution, both administrative and financial, from the center to the regions and individual societies in order to ensure benefits for all. This needs to be made more tangible, so that all stakeholders feel they are a real part of the process. The WFN should foster and encourage the burgeoning expansion of neurology in developing countries, while at the same time maintaining interest

from the developed countries in all WFN activities. This will be done by enhancing educational programs, grants, symposia, CME, traveling fellowships, accreditation and postgraduate training programs. All of these activities can only be accomplished with a sound financial foundation. I feel that as secretary-treasurer, I have proved that the WFN is a financial success and will continue to be so in the future.

International organizations need dedicated and hard-working individuals who can give their time and commit themselves to the greater good. The vision comes from many people, but it is then vital to listen, assimilate and discuss if we are to come up with cohesive solutions to issues, which however problematic, are solvable.

The WFN is an organization run by six elected trustees. They are answerable to the highest authority in the organization, the Council of Delegates. If elected as president, I will adhere strictly to this principle and decisions will be made only by consensus of the trustees with full participation of regional directors who know their regions better than anyone else.

So, to answer the second question, yes, I can make a difference.

With your help, I sincerely hope we can achieve these goals. •

Footnote

1. President's column, *World Neurology* 1991, Vol 6, Number 2.



CANDIDATE STATEMENT: FIRST VICE PRESIDENT

William M. Carroll, MB, BS, MD, FRACP, FRCP(E)

The Australian and New Zealand Association of Neurologists (ANZAN) and the Neurological Society of Thailand together with the Chinese Neurological Society have honored me by nominating me for this important position.

My association with the WFN began as president of the ANZAN when, at the London World Congress of Neurology (WCN) in 2001, I presented the successful bid to host the XVIII WCN in Sydney in 2005. In 2001, I was also elected as a WFN trustee and served two terms. As president of the 2005 World Congress of Neurology in Sydney, I was proud of its educational, social and financial success.

I chaired the WFN Fundraising Committee subsequently, served as a member of the Membership Committee, which I now chair, the Publication and Website Committee the editorial board of *World Neurology*, the Task and Advisory Force for Neurology in Africa, the Asia initiative and the World Congress Supervisory Committee. During this time, I have met and worked with many leading national and international figures associated with the WFN and have come to appreciate the contribution made by them and the advantages the WFN offers as a global organization.

Reasons for Candidacy

For 12 years, I have observed the WFN expand its activities and modernize its or-



ganization to fulfill the role as a global federation and embark on sustained endeavors in education and advocacy of which there have been some notable examples. The first is the Africa initiative, which aims to improve the accessibility to and quality of neurological care for all Africans, especially those in sub-Saharan Africa. The second is the Asia initiative, which together with regional assistance of ANZAN and drive from its current executive and membership, has seen the AOAN move toward self-sufficiency and to have confidence to hold biennial congresses. The WHO also has recognized the growth and standing of the WFN in a number of areas.

The WFN continues to face challenges to its goal of fostering quality neurology and brain health worldwide.

Foremost among these are:

- To maintain and grow sustainable funding for the WFN,
- To protect and grow the WFN visibility and accessibility and
- To promote and sponsor initiatives that can “leverage” growth in neurological in regions of need such as Africa, Central Asia, parts of Eastern Europe and South-east Asia.

In these difficult political and financial times, it is the internal strength of the WFN that will determine its ability to meet these challenges. Through its structure based on inclusivity and a leadership that recognizes the need to adapt, the WFN has this internal strength. The electronic reformatting of *World Neurology*, the modernization of the website and the move to a biennial World Congress rotating successively through the WFN regional organizations are evidence of this.

This adaptive process needs to continue in order to address the first two of the challenges referred to above, which are

in turn critical to the third.

The development of a constantly growing and maintained e-mail registry of individual neurologists will provide a modern communication platform that should facilitate rapid interaction with neurologists directly or through their national and regional organizations building the strength of the WFN. Improved communication will complement the earlier modernizing initiatives and lead to a greater sense of commitment, contribution and benefit from WFN membership. In 2009, as chair of the Membership Committee, I was tasked to address the issues of dues and weighted voting based on size of membership and dues. The resulting “Fairness in the WFN” paper addressed mainly the value of contribution. Now, I believe we need to address the benefit to members so that all members should feel they are both contributing to and benefiting from WFN membership. Direct and timely communication will undoubtedly assist our progress to a more cohesive and effective global organization.

Goals

- To protect and grow the visibility of the WFN brand
- To continue to modernize WFN communication and processes
- To reach more areas in need of neurological care and expertise and to review and expand existing regional initiatives
- To reach, communicate and partner with others to assist the WFN achieve its goals
- To ensure the optimum balance of contribution and benefit for members of the WFN
- For the WFN to be the point of first call for national member societies and individuals requiring assistance on educational issues.

Personal Qualities and Experience

The role of first vice president requires a balance of experience, energy and teamwork. I believe I will contribute effectively

to the stable growth of the WFN, the fulfillment of its mission and the achievement of the stated goals. Listed are some of the positions that I have held, or currently occupy, supporting my candidacy.

General

1988-1996, 2001-present

Head, Department of Neurology, Sir Charles Gairdner Hospital, Perth, Australia

1992-2000

President and Councilor, ANZAN

1996-2004

Neurology Editor, *Journal of Internal Medicine*

1998-present

Chair, Multiple Sclerosis Australia Research Management Council

2003-present

Editor (Asia and Pacific) of *Multiple Sclerosis Journal*

2007-present

Vice President, Pan-Asian Committee for the Treatment, Research and Investigation of Multiple Sclerosis (PACTRIMS)

2008-2012

Vice President, Asian and Oceanian Association of Neurologists

2012

Western Australian of the Year — Business and Professions

WFN

2001-2006

Elected Trustee of the World Federation of Neurology

2004-2008

WFN Director of the World Neurological Foundation

2005

President, XVIII World Congress of Neurology in Sydney, Australia

2005-2009

Chair Fundraising Committee

2009-present

Chair Membership Committee

2009-present

Member Congress Supervisory Committee •

CANDIDATE STATEMENT: FIRST VICE PRESIDENT

Ryuji Kaji

After serving as an elected trustee for six years and as the chair of the Asia Initiative for three years, I would like to introduce myself as a candidate for the first vice president.

Background

When WFN was launched in 1957, its aims were “to dissemi-



nate information in neuroscience, to foster international collaboration in research and to help neurologists in developing nations provide neurological services.” The Japanese Society of Neurology was founded in 1960, being encouraged by WFN. Per request from WFN, the Japanese Society hosted the first Asian Oceanian Congress of Neurology (AOCN) in 1962 in Tokyo.

As a young medical intern in Kyoto in 1981, I attended the World Congress of Neurology held there. The exposure to the distinguished neurologists

strongly pushed me to become a neurologist. I chose my field as EMG and clinical neurophysiology, and after being trained in the U.S., I returned to Kyoto University with Professor Jun Kimura, who became the new chair of Neurology after his career in Iowa. I am glad he initiated me into WFN as I like this line of work very much indeed. We for the first time discovered IVIg as effective in treating multifocal motor neuropathy, a mimic of ALS. I also became interested in treating dystonia with botulinum toxin using EMG skills, entering into the field of movement disorders.

When I took the chair in Tokushima University in 2000, I organized a team accepting fellows from Asian countries. Among these, a Filipino neurologist drew our attention to lubag disease, an

endemic dystonia-parkinsonism in her hometown. Collaborating with Filipino neurologists, we could clarify the causative gene, the pathology and treatments. We could not make it without dedication of the local experts, and were fortunate to return the achievements back to patients. The lesson we learned was that the collaboration has to be bilateral rather than unilateral. Working with our colleagues in neurogenetics, we discovered new genes causing ALS such as OPTN and TFG.

International Activities

During 2000-2006, I served as an executive member of the International Federation of Clinical Neurophysiology (IFCN). I planned and led an expert meeting for setting new electrophysiologi-

CANDIDATE STATEMENT: SECRETARY-TREASURER GENERAL

Wolfgang Grisold, MD

I want to apply for the position of secretary-treasurer general for the upcoming election at the WCN 2013 in Vienna.

I have been a member of the WFN Education Committee for more than 10 years, have chaired this committee and am now co-chairing. I am chair of the Teaching Course Committee. Since Bangkok 2009, I am an elected trustee of the WFN, and was re-elected in 2012 for a second term.



I was responsible for organizing the educational program in Marrakech, and currently for the WCN 2013, where I am also the congress secretary. Being an active part in the new organizational tasks, which have been introduced into the WFN in the past years, I have experience and structural knowledge of the WFN's organization, which is necessary for this important position.

The World Federation of Neurology is comprised of 114 international member societies in 113 countries that aim "to foster quality neurology and brain health around the world." This mission is ultimately intended to improve the outcome of patients with neurological disease.

The WFN has undertaken many opportunities to promote its mission internationally through its world congresses, which are carried out biannually in joint cooperation

with regional societies.

It has regional initiatives in Africa, Asia and South America, collaborates with global institutions, such as the WHO, and sponsors several projects, including grants, exchange programs, a website and educational activities structured as exchange programs, teaching centers and also teaching courses jointly with the EFNS. The WFN has an official journal, *The Journal of the Neurological Sciences* and a regular magazine, *World Neurology*, that is available online and will be vital for the future activities of the WFN. A successful cooperation with the AAN making Continuum available in low income countries is a permanent educational success.

This profusion of activities and offices has had an impact on the WFN's organizational and financial structures, and it will fall to the secretary-treasurer general to provide the platform for improving the efficiency of both.

Application Scheme

The position of the secretary-treasurer general is an important position of trust situated between the president and the elected trustees, the secretariat and its 114 member societies.

The role of the secretary-treasurer general should, on one hand, involve collaboration with the president and trustees in promoting and resolving important issues, offer suggestions and solutions and improve and develop administrative tasks, and on the other hand, develop a service-oriented communication with our members in order to improve the needs of this global society.

International organizations such as the WFN need a strong organizational structure to support and service the efforts of the organization. The present organizational structure has been overwhelmed by the increasing range of WFN activities and needs to be adapted. The organization is a U.K. charity and will need to internationalize to meet the growing support needs of its officers and committees.

This cannot only be achieved by an increase of human resources, but also the increased implementation of further "virtual offices," such as the adoption of Google technology, which is just the beginning. The continuing aim should be to implement an organization structure capable of meeting the many needs of the WFN while increasingly exploiting modern media.

No society can work without adequate funding, and previous management decisions have prudently positioned the WFN with adequate funds to endure one or two years without income, which could result from the cancellation of a congress or a major financial crisis. The sources of finances for the WFN include not only membership dues but also income from congresses and publications. Additional sources of revenue are more difficult to realize, especially as worldwide support from industry has significantly diminished. This is a loss on one hand and an opportunity on the other to seek new means of fundraising. Over time, the WFN has experienced increased operating expenses, in particular through its worldwide initiatives, grants and spending on member activities that help to realize its main goals as a global scientific society.

The future aim will be to keep the

WFN on a sound financial background, but encourage spending on future projects and also co-sponsorship with other institutions or scientific or national societies. This will need a regular budget update, which should inform on the current financial activities as well as enable budget planning in larger dimensions.

The WFN's bylaws and organizational guidelines have served it well over its history, but no longer seem to fulfill its present-day needs. For example, the continued change in leadership throughout the organization can result in a loss of continuity. By contrast, many societies elect their presidents one year earlier than the elected term, keeping the past president in place for some time in order to exploit that person's knowledge and achievements during the turnover of command. This model might be a solution for key WFN committees, where the current rapid transition can be disruptive and are not acceptable in a society of the duties and dimensions as the WFN.

The same refers to the portfolios of the elected trustees of the WFN, which need to be defined in more detail in regard to duties and responsibilities. In the context of a large organization, this will help to use resources more effectively.

In summary, my goals as secretary-treasurer general for the WFN will be the

- adaptation and improvement of the society's organization,
- transparency and communication, and
- a sound financial concept.

Due to the insights and impression I have gathered both as a member as well as a trustee of the WFN, I am convinced that I can fulfill this function to the satisfaction of the WFN and its members. •

cal criteria for ALS, which became well known as IFCN Awaji criteria. As a member of International Executive Committee of the Movement Disorder Society since 2009, I engaged in various educational activities on movement disorders.

WFN Activities

Under the presidency of Professor Aarli, I worked as the chair of the membership committee, welcoming Albania, Algeria and Kazafstan as new members. In 2010, President Vladimir Hachinski appointed me to chair the newly formed Asia Initiative, which covers the region of more than 60 percent of the global population. AOCN was going to be held in Melbourne, Australia, in 2012, and I helped conveners and Asian Oceanian

Association of Neurology (AOAN) to promote the meeting. It was a great success not only in science and education but also in financial aspects. Its surplus and WFN educational grants for Asia now form the firm basis of the new AOAN administration. We decided to have the meeting every two years rather than four years in the past.

The next AOCN is hosted by our colleagues in Hong Kong in 2014, and promises success because a large number of Chinese neurologists are expected to attend. These activities succeeded in revitalizing AOAN along the cause of WFN.

Asia is exploding in population, and the accelerated aging brings neurological disorders such as stroke and Alzheimer's disease to the forefront.

Asian countries including Japan and China have a steep surge of the aged during 2000-2030. In future years, other developing countries should join. The number of stroke patients in Japan increased by more than one million over the last decade. The expenses of care exceed \$50 billion (U.S.) per year, causing downturn of the Japanese economy. We urgently need to increase awareness of stroke prevention among people in Asia and other regions, for coping with neurological diseases in the aged is a major issue of the mankind.

Through my experience in Asia, I believe that the same approach should be effective for other parts of the world: All of the efforts have to be bilateral, respecting developing regions and their neurologists.

Goals and Objectives

- To further develop the regional initiatives including Africa, Asia, and Latin America, newly forming Pan-Arab Initiative, all represented by the local neurologists,
- To create and promote regional meetings that will compare to EFNS meeting in the long run,
- To increase the travel grant for developing nations to join the delegates meeting, and
- To work in concert with the new president to create a new world helping each other in neurology.

I will work hard for the cause of WFN, regardless of the outcome of this election.

But, if I am elected first vice president, I will work even harder. •

CANDIDATE STATEMENT: SECRETARY-TREASURER GENERAL

Stanley Fahn, MD

I cite some of my leadership and innovative past activities as an example of my qualifications for the position as secretary-treasurer general of the WFN.

I am the H. Houston Merritt professor of Neurology and director of the Center for Parkinson's Disease and Other Movement Disorders at Columbia University Medical Center in New York. I remain active in patient care and teaching, having trained more than 130 movement disorder fellows over the years. Throughout my career, I have been involved in clinical research, and earlier in basic science research.



I consider myself to be innovative and creative in that I came up with the idea of uniting movement disorder specialists by organizing an international society, and was able to successfully execute this activity. For this task, I asked C. David Marsden to join me in co-founding the Movement Disorder Society (a member society of the WFN). One purpose for that formation was to create a journal for the subspecialty and for it to contain videotapes of patients being described. Five leaders in the field were invited to meet in my hotel room in Hamburg in the fall of 1985 during the meeting of the World Congress of Neurology, and together we laid out the plans for the society's founding and establishing its journal. Marsden and I became the first co-editors of *Movement Disorders*.

In another creative mode, I organized the World Parkinson Coalition in 2004 for the purpose of sponsoring a World Parkinson Congress, in which the participants would not only be neurologists, but would include patients, families and care providers, as well as health professionals (including non-neurologist physicians, nurses, physiotherapists, speech therapists, etc.) and neuroscientists.

The first World Parkinson Congress was held in 2006 in Washington, the second in 2010 in Glasgow, Scotland, and third will be held this October in Montreal. The congress has gathered professional societies and lay organizations as partners in sponsoring the congresses. More than 3,000 attendees participated in each of the first two congresses. The scientific program of the congress holds the interest for all of these disparate groups and has them talking to each other. This is the only Parkinson meeting in which patients and care providers play an equal role

with health professionals in both organizing the meeting and speaking in it.

With the American Academy of Neurology (AAN), in my stint on the Science Committee, I came up with the arrangement for adding Poster Sessions to the annual meeting before any such sessions had been carried out at any neurology meeting. In my chairmanship of the AAN's Education Committee, I created the concept of evening seminar case presentations, starting with the establishment of the Unusual Movement Disorder Seminars and co-chaired these with Marsden; these were so popular that we conducted two seminars at each of the annual meetings. I co-chaired these sessions for 20 years. Based on our success, other subspecialists began their own evening case presentation seminars. These continue to remain an excellent method of teaching.

I co-founded the Parkinson Study Group with Ira Shoulson; this group organizes and conducts clinical trials on Parkinson disease. I served as co-chair for its first 10 years.

As examples of my leadership roles, I was elected president of the AAN, having previously served in other officer levels. I also served as first vice president of the American Neurological Association (ANA). I was the first president of the Movement Disorder Society. In my own academic department at Columbia University, I organized and developed the Movement Disorder Division. I organized numerous international conferences on dystonia, myoclonus and Parkinson disease, and actively managed the publication of those proceedings.

I have received several honors and prizes. I was elected a member of the Institute of Medicine of the U.S. National Academies. From the AAN, I received the Robert Wartenberg Award for Outstanding Clinical Research, the A.B. Baker Award for Excellence in Neurological Education, and was the first recipient of the Movement Disorder Award. From the ANA, I was the recipient of the First Soriano Award. From the Parkinson's Disease Foundation, I was awarded the James Parkinson Medal given once a decade. From the American Parkinson Disease Association, I received the Fred Springer Award.

I also devote some of my time to assist patient organizations. I am the scientific director of the Parkinson's Disease Foundation. I serve on the Board of Trustees of the Dystonia Medical Research Foundation.

Vision Statement

Although I have attended many World Congresses of Neurology sponsored by the WFN, I have not been engaged at any executive level with the organization. Thus, if elected, I would come to the WFN with "fresh eyes," and no preconceived notions. Instead, I could use my skills and knowledge from working with other organizations on how to make the WFN more meaningful to the lives of the international community of neurologists. The primary goal of neurologists is to improve neurologic health by providing care and

advancing better treatments. Much of this goal is achieved by the combination of education and research. My vision of the WFN is that it should serve as a major vehicle to enable the entire world community of neurologists to better achieve this goal. The WFN is especially vital for neurologist who are not members of a subspecialty society and are located in parts of the world where there is no strong national neurological society to assist in their education.

The WFN has been the sponsor of the World Congresses of Neurology (WCN). In fact, the WFN is probably best known by neurologists for these congresses, rather than for its other activities, such as its journals. If I am elected secretary-treasurer general, I would learn about all the federation's activities, and help make the WFN become better known by neurologists around the world. We can assist isolated neurologists by not only having them attend our congresses but by sending superior educators to visit them in areas where education has been weak.

I am pleased to say that I have attended almost all of the WCNs since I was neurology resident in the early 1960s. The WCN should be promoted to serve as a forum for neurologists, particularly those from parts of the world where no major neurological meetings are held and where no strong society promotes the interests and education of neurologists. For these neurologists, the WCN should be a magnet for a place to meet one another and learn about the latest advances in neurology.

With the AAN, I have just finished serving four years as the chair of the Meeting Management Committee. My experience in planning AAN meetings could be useful in helping the planning and execution of future WCNs. The WCN must not only be strong financially, but also must inspire neurologists from around the world to attend and obtain a valuable educational experience. Raising funds for travel grants for young neurologists, especially those in training from financially troubled parts of the world should be a tactical goal. Having these neurologists experience the WCN would introduce them to the value of these meetings, and hopefully instill in them the knowledge as to how useful the WCN can be for educational and scientific advancement.

If I am elected secretary-treasurer general, I will serve an active role and try to benefit the organization in whatever means I am capable of. Since national neurological societies are the actual members of the WFN, the WFN should reach out to these societies, and through them, to their members, to exchange ideas, on what each society's role should be and how each can be helpful to the others. Harmony, cooperation, engagement and joint participations should be encouraged for the benefit of all. •

CANDIDATE STATEMENT: TRUSTEE

Professor Ching-Piao Tsai

I am section chief of the Neurological Institute at Taipei Veterans General Hospital and National Yang-Ming University, Taipei, Taiwan. I am also clinical professor at the National Defense Medical School, Taiwan.

I graduated with a MD degree from China Medical University, Taichung, Taiwan.



After successfully completing my internship and residency, I went on to pursue my academic research interests as a research fellow in leading institutions overseas including: the University of Sydney, Australia, where I obtained my Master of Medicine degree; Virginia University, USA; and Utano National Hospital, Kyoto, Japan.

To date, I have contributed more than 50 peer-review papers in the field of neuroscience to the international scientific and medical community. I am editor-in-chief of *Acta Neurologica Taiwanica* and serve on the editorial and review committees for the *Journal of Pediatric Neurology*, *Journal of Pediatric Infectious Disease*, and the *Journal of Neurology, Neurosurgery & Psychiatry*.

I am an office-bearer and member of many distinguished professional societies and organizations. I am former president of the Asian and Oceanian Association of Neurology, as well as past president of the Taiwan Neurological Society, where I am currently chief supervisor and national delegate. I also hold prestigious leadership appointments, including serving on the Boards of Directors for the International Alliance of Motor Neuron Disease and for the Orphan Drug Committee, Department of Health, Taiwan.

Asia-Pacific is an emerging region in the world with a growing population as well as increasing neurologists. Thus, a trustee elected from the Asia-Pacific region is crucial. I would like to express my gratitude for the support during my AOAN presidency between year 2012 and 2016. I am devoted in the bilateral relationship between Asia-Pacific region and WFN. He is the best candidate for the running of the trustee of WFN. This nomination is fully supported by the Taiwan Neurological Society and your support will be much appreciated. •

CANDIDATE STATEMENT: TRUSTEE

Amadou Gallo, DIOP, MD, PhD

I am professor of Neurology, Epileptology and Neurosciences at the University Hospital of Dakar, Senegal. I am 54 years old; graduated MD in 1988 in Dakar and specialized in neurology (Universities of Toulouse, France and Dakar, Senegal). I obtained my PhD in neurobiology in Limoges, France, in 1995 and served as assistant professor of Michel Dumas, at the University Hospital of Limoges, for four years. I also have expertise in public health and health promotion (University of Nancy, France).



I was promoted to the position of professor of Medicine in 1996 after a continental contest and was ranked first. I have co-chaired with Professor Johan Aarli, father of the "Africa Initiative" of the World Federation of Neurology. I am chairing it currently.

The participation in several scientific conventions in 53 countries across the world and having grown in a multicultural, multilingual environment make me a real citizen of the world. All of these experiences have given me an international open vision and approach for global health care and education.

My feet are deeply rooted in the soil of the African continent with its enriching young and promising environment. My brain is dedicated to always try and reach the excellence. My hands are widely open to the world's diversity and infinite opportunities.

Son of a teacher, I am convinced that education and training are the keys for bridging any gap and go beyond the borders raised by economic, environmental and human factors. A specific characteristic of my personality is to gather people around important goals; try to obtain consensus when there are antagonisms. However, when the time comes for making a decision, I am able to do so in a gentle and balanced way. With these qualities and your support, I will carry out the WFN's vision: "fostering quality neurology and brain health worldwide."

Achievements

Over two decades, I have been closely involved in promoting

training in neurology and neurosciences, collaborative researches and initiatives for improving the availability and quality of care for neglected populations. Since 2000, I have been responsible for post-graduate education of junior medical staff and trainees coming from 14 African countries, by setting up training and specialization certificate in neurology in the University of Dakar. This academic course enrolls 25 students from Africa annually. We are proud that over 12 years, we have many graduates who are now serving as neurology specialists in their countries, including, for some of them, the first neurologist ever. In 2010, I set up, at Dakar, the first University Diploma of Epileptology in Sub-Saharan Africa. Twenty-nine trainees from eight African countries have completed this brand new course. I am the past-chairman of the Society of Neuroscientists of Africa, which aims to promote clinical and basic neurosciences across the continent.

Before deciding on priorities, one has to know facts. I set about doing this by creating the Neuro-Staff Africa Directory, which is contributing to improve our communication with the world. The data are open to all, for the first time, an opportunity to have the contact of any individual working in Africa in clinical, surgical and basic neurosciences and psychiatry (names, telephones, e-mails as well as fields of interest).

In terms of clinical care, I continue to carry a large clinical load by consulting 4,000 patients per year, from Senegal, international institutions located in Dakar and neighboring countries. Very often and in very difficult situations, my team and I travel to rural areas for care delivery and training via two innovative initiatives: Neuro-Caravans and Caravans for Epilepsy. I have created these concepts, which entail a two-day session of consulting on a large number of people, training health staff, meeting community leaders and caring for patients residing far from capital cities in resources-limited areas. Since May 2005, we have applied these innovative public health methodologies for contributing and reducing the neurodiagnostic and treatment gap. And it works.

Every year, I lecture for 450 medical students, postgraduate trainees and nurses. The fact that I have intervened on local and international media for health education and counseling requires a sense of public responsibility and dedication. The fields I have emphasized over the years is how to better help people with neurological diseases, raise awareness and develop

capacity building, such as medical education in mass media, epilepsy, poliomyelitis and measles eradication in Africa.

As WHO consultant, I have gathered patients, families and health and social professionals to set up the Senegalese League Against Epilepsy (ILEA). In my roles as founder and current president, I have contributed to raise awareness among the general population, and community leaders. This league is a recognized leader by WHO, (ILAE) and International Bureau for Epilepsy (IBE), which awarded me in 2001 the title of Ambassador for Epilepsy. We have contributed in setting up and chairing the first Commission on African Affairs of the ILAE.

I have played a key role in the Global Campaign against Epilepsy organizing in Senegal the first Demonstration Project in Africa. I have been the coordinator and main author of the first WHO advocacy report on "Epilepsy in the WHO African Region: Bridging the Gap." This advocacy and policy document for Africa intends to raise awareness, fight against taboos and discrimination toward people with epilepsy and reduce the burden of their condition. We train doctors and paramedics in Dakar and in the region to better diagnose seizures and treat them. Schoolteachers also have been trained on this common disorder among the young, which leads to many cases of school withdrawal due to ignorance. We have set up a Cheap Drug Bank as in the model I visited in Chile.

I also have been the convener of several international scientific meetings in Dakar and elsewhere. One of the major outcomes has been the African Declaration against Epilepsy, which has been proclaimed in May 2000.

Author of more than 300 scientific communications and publications, I have been honored to be a co-author of WFN Handbooks on Public Health and WFN Education Committee's Seminars and also Pedley and Engel's Epilepsy Textbook.

I keep abreast with the latest developments in my fields by undertaking study and professional visits to worldwide renowned institutions and was able to build partnerships with medical services such as: UCLA, McGill, Heemstede, Tokushima, and several institutions in France, Pan-Arab Union and in Africa.

What Would I Contribute?

As I see it, the way the WFN should operate is through mobility and partnership. Time has really come for the "South," particularly Africa, to reach that level of responsibility in World Neurology governance.

Not only for sympathy, but because it would have a tremendous impact on projects of implementing world-class neurology in developing countries. It also would strengthen the health policies for noncommunicable diseases, which are dramatically increasing in terms of morbidity and mortality in the "South." The rainbow light must touch the WFN. As a WFN Trustee, my mission statement is to bring into action my years of diverse and rich experience, enforced by an ability to overcome any kind of obstacles. I will share with the member societies, particularly from the developing world, concrete success stories and facts. My origins are from the South, namely Africa, but I will be dedicated to the world.

I am running for a position of WFN Trustee and in order to contribute in reaching these goals, my main and only concerns are:

- A world where neurology contributes to human health management and sustainable improvement in every country
- Clear-cut, efficient cooperation and exchanges between developed and developing countries
- Strengthen training opportunities for doctors and paramedics all over the world, with diversified international partnerships
- Make an impact on policies that will take into account raising the burden of noncommunicable diseases all around the world.

The African member states of the WFN are not a majority, therefore my eventual election as a trustee, would and should be global. Every voice in my favor, coming from Europe, Middle-East and Maghreb, Americas, Asia and Oceania should reflect the world in its diversity and its ambition to see WFN survive sustainably, with full understanding of its future, and its balanced, generous vision.

My achievements, if ever consecrated, by a WFN trustee position, should give courage to the new generation of neurologists from everywhere to go beyond any intellectual border and make the world more open with confidence and commitment.

Summary of my Vision

- Ambition for a first-class neurology worldwide
- Friendship and partnership between member societies
- Reinforce regional management
- Integrity in governance
- Commitment to youth in neurosciences
- Attention to any need, especially for low- and middle-income developing countries. •

CANDIDATE STATEMENT: TRUSTEE

Donna C. Bergen, MD

Over the past decade, the WFN has evolved into a more ambitious, dynamic organization, with a clear mission and an energetic leadership. My goal as a trustee is to ensure the continuation of this growth and to expand the influence and effectiveness of the WFN.

I have worked in the WFN for more than 20 years in a number of leadership positions, including membership on the executive committee of the Education Committee, co-opted trustee, chairman of the Applied Research Committee, co-chairman



of the Scientific Program Committee for the next World Congress of Neurology in Vienna, and membership on the World Health Organization's (WHO) neurological advisory panel to revise the ICD-10 diagnostic codes. During those years, the global burden of neurological disorders has grown and aging populations have expanded in all parts of the world, requiring an increased allocation of health care resources to provide for those with stroke, dementia, epilepsy and other chronic neurological disorders. Methods of prevention or reducing the incidence of many of these disorders exist, but also require greater public health attention and implementation.

The WFN's mission is the ambitious one of "fostering neurology and brain health worldwide." It is uniquely able to promote this mission:

- Through its global membership, it can and does enlist the energies and abilities of some of the most able neurologists and neuroscientists in the world.

- Its cordial liaisons with the most influential international subspecialty neurology organizations can promote efficient collaborations in education, research and advocacy in a time of shrinking resources.
- The formation of the Global Brain Alliance offers an opportunity to international neurology, neurosurgery and psychiatry to speak with a single, powerful voice on behalf of those with brain disorders.
- Collaborative projects with the World Health Organization can focus attention on global neurological disorders and identify the need for training more neurologists in many parts of the world.
- WFN educational projects aimed at neurologists, primary care physicians and others demonstrate the many ways the neurology "knowledge gap" can be reduced.

As an elected trustee, my working experience with WFN leadership, familiarity with its committees and task forces, and commitment to the public health aspects of neurology will help the WFN use its alliances and resources to achieve specific goals. Expanding its partnerships with other global organizations will provide more funding for educational and

research grants. Deepening our relationship with WHO will place neurological disorders more vividly onto the global health care agenda. Attracting more young neurologists into the WFN will ensure the growth of the organization. Reaching our goal of helping establish more neurology training programs in Africa will allow the WFN to identify other regions where neurologists are scarce and where support would be useful. Increasing the number of the WFN's member societies, or of associate members from countries where neurologists are scarce and no society exists, should bring new perspectives and energy into the WFN.

International neurology as an area of research, education and training has only recently attracted wide attention. As this field grows, the WFN should continue to be at its center, a source of expertise, collaboration and experience. Its new slate of officers and trustees should be in a position to advance this agenda, to maintain the momentum of ongoing programs and to devise new ways to promote brain health. •

CANDIDATE STATEMENT: TRUSTEE

Professor Marco T. Medina

It is a great honor to participate as a candidate for a World Federation of Neurology (WFN) elected trustee. I am professor of Neurology, dean of the School of Medical Sciences at the National Autonomous University of Honduras (UNAH) and WFN regional director for Latin America. I got my MD degree at the UNAH, I made my neurology training at the National Institute of Neurology in Mexico, and the pediatric and adult epileptology/neurophysiology training at the Saint Paul Center and the Aix-Marseille University, France, and later at the University of California, Los Angeles (UCLA).

We founded with the support of the WFN the Honduras Neurology Training program, a WFN pilot program. By 2012, the program has resulted in a 50 percent increase in the national neurologist ratio per inhabitant, significantly improved the quality of patient care and promoted research in the neurosciences. This program has provided a valuable model for other developing countries with similar needs for neurological care

My main research activities are related to the epilepsy genetic, neuro-epi-

demiology and vascular endothelium. We have co-discovered the EFHC1 juvenile myoclonic epilepsy gene and the GABRB3 childhood absence epilepsy gene, and we established a community epilepsy intervention program in Salama, Honduras, where we reduced the rate of epilepsy from neurocysticercosis (NCC). I have published more than 111 peer-reviewed publications, 30 book chapters and served as editor of five books. I am editorial member/reviewer of several journals (International Stroke Journal, Neurociencias, Revista Neurologia, Epilepsia, Journal of Neurological Sciences, etc).

In the last 14 years, I served as member of the WFN Education Committee, and in March 2012, I was elected the WFN regional director for Latin America. We are working with Gustavo Roman and Ana Robles on the Latin America Initiative as well as on the organization and foundation of the Pan American Federation of Neurological Societies (PAFNS), and on March 20, 2013, national delegates from the continent evaluated the PAFNS constitution and bylaws in San Diego.

The WFN is the international body representing the specialty of neurology in more than 100 countries/regions of the globe. My main goals and objectives for the WFN are:

- Neurology education in developing countries represents a challenge due to the myriad socio-economic and structural problems these countries are facing. My primary goal will be to assist low-resource

countries in providing meaningful education for its neurologic health care providers and thus improve the neurologic health of its citizens.

- One of the major barriers to the provision of quality care for patients with neurological disorders in developing countries is a low ratio of neurologists per inhabitants. The World Health Organization recommends one neurologist per 100,000. To counteract the effects of the emigration of neuroscientists to countries with more resources ("brain drain"), I will support the principle of training neurologists in their native countries. The primary strategy is to help countries develop their own training programs.
- Neurology education must be tailored for each country or region. The educational needs of developing countries are not satisfied with programs established for industrialized nations, and education programs must be organized around the individual epidemiological profile. We can promote the south-to-south educational approach to train neurology experts, subregional educational activities and virtual educational activities among others.
- To develop and promote regional neurology academies and regional federations of neurological societies.
- Neurological disorders are the greatest threats to public health; we need to promote the public awareness.
- To improve the collaboration with the World Health Organization and other international neurological organizations such as ILAE, WSO, etc.
- Promote research: It is crucial to develop basic and clinical research worldwide. •

Recent Literature

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<http://pn.bmj.com/content/early/2013/04/03/practneurol-2013-000558.extract>

FILMS

continued from page 1

ders before the early days of cinematography. Working at the Salpêtrière in Paris, Charcot's photographer Albert Londe experimented with a 12-lens camera for this purpose. (See Figure 1.)

Neurological films were used for educational as well as scientific purposes. Scientists wished to show and prove their results at medical and physiological congresses, even though Doyen's films were excluded during early French meetings (but demonstrated for the British Medical Association in Edinburgh, including a film on craniotomy).

One of the persons who used cinematography for that purpose was Rudolf Magnus (1873-1927). Of German descent, he became professor of pharmacology (including physiology) at Utrecht (Netherlands) in 1908. Following a visit to Sherrington in Liverpool, he continued working on attitudinal reflexes, results of which he published in his *Körperstellung* (1924; "Body Posture"). He was nominated for a Nobel Prize, but died unexpectedly in 1927.

In the prestigious Croonian Lecture of 1925 (London), he said: "Many masterpieces of painting or sculpture representing human beings are consistent with the laws of attitudinal reflexes. But under pathological conditions ... they are released, and are now used frequently by neurologists for diagnostic purposes." In cooperation with De Kleyn, he found that tonic labyrinth reflexes should be distinguished from tonic neck reflexes, and with Rademaker, he discovered that the cerebellum does not play a role in body posture. (See Figure 2.)

Among the first congresses where cinematography was used was the Eighth International Congress of Physiology in Vienna (1910). Comments on the congress can be found in the diaries of Magnus. He was not only a great physiologist but also an average attendee, writing that he drank a beer after the opening dinner with the English delegates including Sherrington, whom he admired and who had recently published the famous *Integrative Action of the Nervous System* (1906). Magnus reported about interesting lectures he attended and was stressed about his own lecture the following day. The official report of the congress describes remarkable technical aspects, including the fact that lecturers were using cinematography more frequently. Magnus' lecture on movement control by the central nervous system was mentioned as an example. Apparently, his film was so interesting that he was asked to show it twice, and in his diary, we read that the cinematographical projection went well and that the attendees were satisfied. In 1913, the Congress of Physiology was organized in Groningen (Netherlands). The official report mentions the highlights including a lecture by Ivan Pavlov, but also Magnus and his use of cinematography to demon-



Figure 1. Albert Londe at the Salpêtrière. The sitting person is physiologist Etienne-Jules Marey (1830-1904), a pioneer in the development of motion picture. SOURCE: SOCIÉTÉ FRANÇAISE DE PHOTOGRAPHIE, PARIS



Figure 2. Still from a film showing young Rademaker and his teacher Magnus in Utrecht (early 1920s). SOURCE: INSTITUTE OF SOUND & VISION, HILVERSUM, NETHERLANDS.

strate his work on body postures. The use of cinematography had increased at this congress and now included microscopic images and slow-motion films.

What about the first International Congress of Neurology in Bern (Switzerland, 1931)? Looking at the names in the *Proceedings*, it is obvious that many well known neurologists, some of whose names became eponyms, attended the congress and indeed several films were shown.

Otto Marburg of Vienna demonstrated a case of Wilson's disease and a case of

hydrocephalus, diagnosed by ventriculography and improving following treatment by X-rays. Kinnier Wilson himself was also present and lectured about disorders of tone. In a session on investigative neurology, chaired by the Portuguese neurologist Egas Moniz, physiologist Walter Rudolf Hess of Zürich showed a film on localized stimulation of the brainstem, caudate nucleus, thalamus and hypothalamus. In a session on clinical and biological issues, the Swiss surgeon Fritz de Quervain (of Bern) showed a film on movement disorders of the lower limbs.

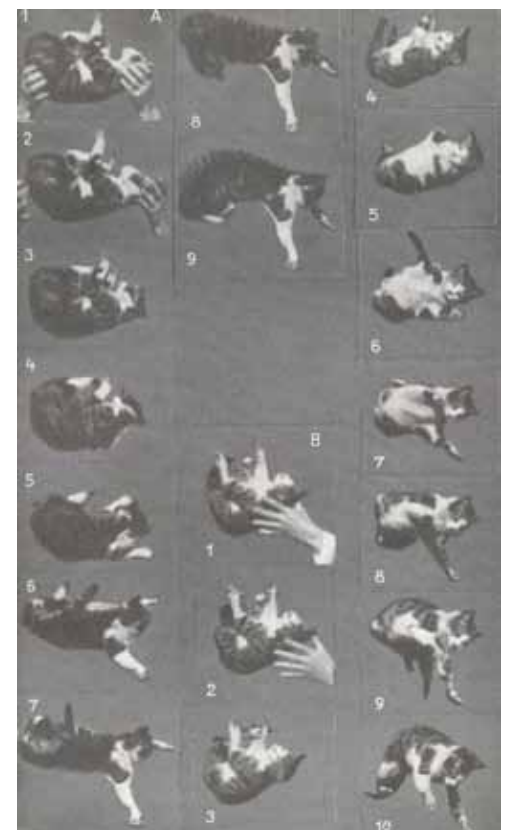


Figure 3. From Magnus' *Körperstellung*; turning in free fall; the reaction follows with extraordinary rapidity and security.

The length of the films was indicated in meters, not in minutes. Neurologists were not only early using photography but also cinematography. •

Further Reading

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Koehler is a neurologist in the department of neurology at the Atrium Medical Centre, Heerlen, the Netherlands. He serves as senior co-editor of the *J Hist Neurosci*. Visit his website at www.neurohistory.nl.

The International Working Group of Young Neurologists and Trainees (IWGYNT)

BY JOHANN SELLNER AND WALTER STRUHAL

The International Working Group of Young Neurologists and Trainees (IWGYNT) was initiated in 2009 and held its inaugural meeting at the World Congress of Neurology in Bangkok. IWGYNT's vision is to advocate young neurologists interests on a worldwide basis within the World Federation of Neurology. IWGYNT is represented by one member (Walter Struhal) within the Education Committee of the World Federation of Neurology. (See *World Neurology*, April 2010.)

Our mission is to:

- Represent residents and young neurologists interests and initiatives with a single voice,
- Establish networking between young neurologists, and
- Support international training exchange.

The group is organized as a delegate panel consisting of two delegates from each continent. Only a national or international neurological body representing young neurologists in that area may send delegates. Currently, Africa, Asia, Australia, Europe, New Zealand and the U.S. are represented within IWGYNT.

Within the last years, we managed to establish a network between young neurologists of five continents. This network serves as strong platform for young neurologists initiatives in the future. We have started to employ this network to collect ideas and establish initiatives on training improvement within young neurologists worldwide.

IWGYNT actively promotes topics of interests online employing WFN's website and social media channels.

IWGYNT Roundtable at AAN 2013

The IWGYNT seeks to represent the interests of junior neurologists within the World Federation of Neurology (WFN).

The founding members in 2009 were junior neurologist organizations from different continents including the European Association of Young Neurologists and Trainees (EAYNT), the Pan-African Association of Neurological Sciences (PAANS) and the Asian Neurological Society (ASNA), Asia-Pacific Association of Young Neurologists and Trainees (APAYNET), Australian and New Zealand Association of Neurologists (ANZAN). In 2012, the IWGYNT was pleased to welcome the Consortium of Neurology Residents and Fellows (CNRF) of the American Academy of Neurology (AAN) as an additional member.

At the AAN annual meeting in San Diego, the CNRF organized various events called "the experience for junior members and residents." The international roundtable discussion featured CNRF chair-elect Justin Jordan (Dallas) and president David R. Mayans (Winston Salem, N.C.) as well as Johann Sellner (Salzburg, Austria) for the EAYNT and Tissa Wijeratne (Melbourne, Australia) for the APAYNET. Further delegates included Rachel Marin De Carvalho (Sao Paulo) and David Avila (Ecuador).

A variety of topics relevant for residents and trainees were addressed and ideas for future joint projects were collected. These included the spectrum of residency training in different countries and continents and emerging educational initiatives with worldwide



International roundtable participants at the 2013 AAN meeting. From left: Johann Sellner, Tissa Wijeratne, Justin Jordan, Rachel Marin de Carvalho, David R. Mayans and David Avila.

The IWGYNT seeks to represent the interests of junior neurologists within the World Federation of Neurology.

relevance. Additional topics discussed were exchange programs to gain cross-cultural experience and improve clinical practice.

As the EAYNT is maintaining a Pan-European exchange program with 106 departments across Europe, this could serve as a basis for exchange within the IWGYNT.¹ In addition, the participants

agreed to launch an international survey on different aspects of residency training worldwide and assemble a practical guide on residency training and terminology of neurology in the United States.

The IWGYNT is a dynamic and growing group of enthusiastic residents, trainees and fellows. Major activities are regularly reported on Facebook and Twitter. The events of interest for junior colleagues during the World Congress of Neurology Oct. 21-26 in Vienna, include the IWGYNT session, a visit to the University hospital of Vienna and get-together events; these are covered in a recent article in the *European Journal of Neurology*.² •

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Building Local Networks of Expertise

BY ALBERT C. LUDOLPH AND THOMAS BAK

In June 2011, the World Federation of Neurology Research Group on Aphasia and Cognitive Disorders and the World Federation of Neurology Research Group

on ALS and MND collaboratively organized workshops on amyotrophic lateral sclerosis and frontotemporal dementias in China and Mongolia.

Financed by the World Federation of

Neurology, Facundo Manes, Thomas Bak, Suvarna Alladi, John Ravits and Albert Ludolph held lectures on the relationship of these two diseases, both on the neuropathological and clinical levels. They were supported by colleagues from China and Mongolia, respectively.

In China, more than 200 professionals attended the meeting, the program raised a lot of interest and finally the two groups together with their Chinese colleagues started to organize a local network of expertise. This includes the buildup of a registry for ALS/MND in Beijing (Professor Liying Cui) which is mirrored by a registry for ALS/MND in Germany and potentially in Scotland. Currently, financial support is requested by the Chinese and German governments.

Four days later, an educational course also was held in Ulaanbaatar, Mongolia. It was supported by our Mongolian colleagues and friends; the program was attended by more than 200 Mongolian neurologists. In the meantime, we have decided to also establish a local network of expertise in Ulaanbaatar, which mirrors the networks in Scotland and Germany. The local network of expertise in Ulaanbaatar was established on Jan. 1, 2013, and the World Federation of Neurology will make every effort to support this project financially.

These most successful meetings show that the concept of the WFN to establish international scientific relations among physicians and basic scientists, to hold teaching courses, to provide research groups a common bases and work together and finally establish local networks of expertise is a most interesting future direction of clinical and basic research which is doable and relevant for many fields. •



The Success of Haoua Ousseini Sidibe, MD: From Niamey to Neurology Worldwide

I am from Niger, the country where I grew up, until earning my high school diploma. Thereafter, I pursued my doctoral cycle of general medicine at the University Hassan II in Casablanca (Morocco). Returning to Niger, I worked as a general practitioner at the National Hospital of Niamey. Then I decided to specialize in Neurology, a subject that attracted me for its rigor and finesse during my medical training.

Moreover, the critical shortage of neurologists in Niger (a neurologist to 15 million inhabitants) and the frequency of neurological disorders have further strengthened my desire to study the Neurosciences.

My ambition and motivation are even larger as I would like to get involved in teaching and research. This could help to improve the



Haoua Ousseini Sidibe, MD

teaching of Neurosciences and participate in the improvement of this practice in my country.

To achieve these goals, I decided to do my training in Senegal at Cheikh Anta Diop University, well known in French-speaking Africa for its quality and serious background in the training of qualified medical practitioners. Senegal has an epidemiological framework quite similar to the Niger.

The initial training based on core subjects (neuroanatomy, neurophysiology, neurobiology, neuropathology and semiology) was of great interest to the rest of the program. Subsequently, neurological pathology and explorations (electrophysiology, neuroimaging) was easier to assimilate. The planning of these various teachings is based on continuous programming, seminars, visits and hospital meetings.

In addition, participation in various Congress: Regional Teaching Courses in Cameroon in 2011, the 20th World Congress of Neurology in Marrakech (Morocco) and the 1st African Epilepsy Congress in Kenya has been very rewarding. The event that impressed me most was our participation in the semifinals of the "Tournament of Minds" during the World Congress

of Neurology in Marrakech.

The key items to success in my specialization are the good atmosphere among trainees in neurology and accessibility of our teachers.

However, the low level of literacy among patients is a limit for a good clinical examination. Moreover, the lack of financial resources is a problem for achieving explorations.

For my final year of specialization I did an internship at Rabat's Hospital (Morocco) in the Department of Clinical Neurophysiology, where I had the opportunity to see heritable genetic diseases (Charcot-Marie-Tooth neuropathy, progressive spinal atrophy, sarcoglycanopathy), which are much more rare in Senegal.

My experiences in Morocco and Senegal have allowed me to meet many colleagues from various backgrounds including Mali, Burkina Faso, Senegal, Cameroon, Tunisia, Gabon, Madagascar, Mauritania, Congo, Benin, Morocco, Comoros, and the Central African Republic. Talking to people from different countries has helped me to gain a broader socio-cultural and scientific vision and is a key point for the organization and the rooting of Neurosciences in Africa.

On my return to Niger after special-

ization, I expect to be assigned to the National Hospital of Niamey in internal medicine. My short and medium term projects would be to organize a medical neurology department in Niger with a clinical neurophysiology unit. I wish to promote information and education of the population on the major neurological diseases (epilepsy, stroke, headaches). My ideal in the long term is to have diagnostic procedures available (imaging, electrophysiology) and therapeutic capabilities (stroke unit, functional rehabilitation). In addition, I intend to encourage and facilitate the orientation in neurology for younger generations of doctors. Finally, it is important to encourage the creation and / or enhancement of activities against chronic neurological disorders such as epilepsy.

All these ambitions would be more successful in an exchange framework beyond borders. That's the whole point of having sub-regional training centers involving various nationalities.

On a cultural point of view such a challenge for a woman (because in my country we don't usually have leading roles), appears to be one of the biggest challenges. But with will, nothing is impossible. •

IN MEMORIAM

Hilary Koprowski, MD

Dec. 5, 1916 -

April 11, 2013

BY DON GILDEN, MD

Hilary Koprowski, MD, a distinguished and highly respected biomedical researcher, died on April 11, 2013, at the age of 96. Koprowski was recognized for many achievements, most notably development of the first oral polio vaccine, but also the generation of the oral rabies vaccine currently used worldwide and for his pioneering work in developing monoclonal antibodies to detect and treat cancer.



A native of Poland, Koprowski received his MD from Warsaw University. During medical school, he married Irena Grasberg, a physician who achieved scientific eminence for her pioneering work on the development of the Pap test. Although not raised religiously, Koprowski was of Jewish heritage. Knowing his likely fate had he stayed in Poland, he and his wife

left Warsaw in December 1939, a few months after the Nazis invaded Poland.

During the war years, Koprowski worked with Ed Lennette, an outstanding virologist at the Rockefeller Foundation in Rio de Janeiro. Together they published classic papers on the pathogenesis of Venezuelan equine encephalitis virus. After the War, the Koprowskis moved to the U.S. Koprowski was hired by Lederle Laboratories in Pearl River, N.Y. where he began the most important studies of his scientific career.

During the 1940s, Koprowski was the first scientist to produce attenuated poliovirus by repeated intracerebral passage of poliovirus in cotton rats. His attenuated virus produced immunity in monkeys. He was so convinced that the virus was sufficiently attenuated that he fed it to himself. Afterward, he gave the first live, attenuated poliovirus vaccine to one child in February 1950 and then to 19 more children. Remarkably, none showed any side effects after vaccination, and all of them developed antibodies to the poliovirus.

In 1951, Koprowski reported his remarkable findings at a meeting organized by the National Foundation for Infantile Paralysis. Afterward, Howard Howe, a senior polio researcher, remarked: "I think that Dr. Koprowski's data is extremely valuable in giving us a bridge which up to now we have not really had." The manuscript reporting Koprowski's development of the first live, attenuated poliovirus vac-

cine was published in 1952, years before any papers on polio vaccine development were published by Jonas Salk and Albert Sabin.

Koprowski progressed rapidly with his vaccination studies and organized multiple large clinical trials. By 1957, the efficacy of his vaccine was sufficiently well established to justify the first mass trial of the oral polio vaccine. In 1958, at the invitation of an official of the Belgian Congo, Koprowski's polio virus vaccine was used to immunize 250,000 children in six weeks. None of the children developed polio or any neurological disease, and all produced antibodies to poliovirus. Between 1959 and 1960, nine million children in Poland were immunized with Koprowski's polio vaccine, virtually halting a polio epidemic there. Among those who recognized the significance of

Koprowski's achievement was Albert Sabin, who publicly acknowledged Koprowski as the first to develop a live, attenuated oral polio vaccine.

In 1944, Koprowski first became engaged with the rabies problem in the Americas. Joseph Pawan, an eminent pathologist in Trinidad, told Koprowski about the fight between a vampire bat (a carrier of rabies virus in the Southern Hemisphere) and a fruit-eating bat later found to be rabid. This was almost a prophetic observation of the origin of bat rabies in the U.S. and Canada decades later. Harold Johnson, a staff

member of the Rockefeller Foundation who specialized in rabies, provided Koprowski with a strain of rabies of human origin, which he attenuated by continuous passage in developing chick embryo. This led to the Flury strain vaccine, which was eventually used in dogs for life-long immunity after a single inoculation. Koprowski also used anti-rabies antibody in concert with vaccine, which successfully protected Persian peasants who were bitten by a rabid wolf.

In 1957, Koprowski became director of The Wistar Institute of Anatomy and Biology in Philadelphia where he served for 35 years. He was also professor of Microbiology at the University of Pennsylvania. While conducting his own scientific studies, Koprowski provided remarkable leadership of The Wistar Institute, recruiting outstanding scientists, many from outside the U.S.

In the 1970s, I remember commenting to Stanley Plotkin that I felt privileged to be a "token American" among such talent. The Wistar Institute never had a large budget, and like many biomedical research institutions (and academic research departments today), endured a "soft money" arrangement. Yet Koprowski kept scientists afloat when their funding lapsed, particularly those who worked hard — he always knew what everyone was doing — and pushed them to eventual success.

During his directorship, Koprowski

see KOPROWSKI, page 16

ACTION Report 2013

BY BERNARD YAN

We are grateful for WFN's endorsement of the Australia China Training Initiative of Neurology (ACTION). The course is an intensive training of up-to-date neurological treatments.

ACTION is the collaboration of academic partners in China and Australia. It is between the University of Melbourne, Jiatong University affiliated with First People's Hospital in Shanghai, Fudan University affiliated Huashan Hospital in Shanghai, Melbourne Brain Center at Royal Melbourne Hospital in Melbourne.

It is run by an academic faculty consisting of Professor Terence O'Brien, Professor Stephen Davis, Professor Qiang Dong, Professor Wang Shaoshi, Associate Professor Bernard Yan and Professor Trevor Kilpatrick.

ACTION started in 2010, and we are now in our fourth year of operation. So far, we have had 108 Chinese neurologists



through the course.

The structure of ACTION is run over a two-week intensive learning environment. The first week is in Shanghai in July and the second week is in Melbourne in November annually.

ACTION is a lecture- and workshop-based course. We teach a spectrum of neurological subspecialties including stroke, epilepsy, multiple sclerosis, movement disorders, neuromuscular, neuropsychiatry, neurogenetics, etc.

The final week of the training course in Melbourne is completed with a formal examination on the course's teaching material and the Chinese neurologists are then awarded by the University of Melbourne. •



JNS Update: England Named Editor-in-Chief

At the annual editorial board meeting in San Diego, Vladimir Hachinski, WFN president, and Peter F. Bakker, executive publisher, Global Medical Research Division for Elsevier introduced John England, MD, professor and head of the Department of Neurology, LSUHSC School of Medicine, New Orleans, who will serve as the next editor-in-chief for the *Journal of the*



John England, MD

Neurological Sciences, beginning in July. He will succeed Robert P. Lisak, MD, FRCP, FAAN, FANA, who has served as editor-in-chief since 1997.

During the last 16 years, the journal has experienced enormous growth. Its expanding global presence and impact factor continue to be reflected in the evolving dynamics of its editorial board, authors and reviewers.

Elsevier has announced that it will be initiating several new features for *JNS* in 2013 to allow readers a quick understanding of online articles. These features will include highlights — a short collection of bullet points that convey the core findings and provide readers with a quick textual overview of the article highlighting what is distinctive

about the research; graphical abstract — a concise, pictorial and visual summary of the main findings of the article, which could either be the concluding figure from the article or a figure that is specially designed for the purpose and Google maps — a tool enabling authors to enrich and extend their article by adding interactive maps to highlight their findings in a visual and easily accessible manner. Highlights will be a mandatory element in the submission process but graphical design and Google maps will be optional.

AutoSlides is another new optional, complimentary service available to authors whose papers have been accepted for publication. This service offers authors the opportunity to create

a five-minute presentation with slides (Powerpoint or PDF) and voice-over recordings of their work. AutoSlides will appear on ScienceDirect next to the online article.

Finally, Elsevier is working to simplify formatting references. The new strategy is to focus on accurate, consistent data more than strict formatting of references. References may be in any style or format as long as they are consistent and accurate. The reference style used by the journal will be applied by Elsevier to the accepted article. Authors will be required to correct all incorrect or missing data at the proof stage.

Elsevier will continue to analyze the submission and production process in an effort to provide the best technology and editorial support for the journal's editors, authors and ad hoc reviewers. •

NIRVE: A Tale of Five Continents



During exchange visits, residents from both hosting and visiting sites participate in various lectures and discussions.

BY MARY JANE LIM FAT, MD; JENNY P. TSAI, MD; TIM PATTERSON, BA; MARK KINACH, BA; AND MORRIS FREEDMAN, MD, FRCPC

The Neurology International Residents Videoconference and Exchange (NIRVE) is a resident initiative funded by the Peter A. Silverman Global e-Health Program, Canada International Scientific Exchange Program (CISEPO) and Baycrest Centre for Geriatric Care, Toronto. NIRVE promotes international collaboration beyond political or geographical borders and health care infrastructures. Hosted by the Division of Neurology, University of Toronto and St. Michael's Hospital, Toronto, NIRVE unites residents around the world through videoconference, forging strong professional relationships and friendships.

In 2008, Toronto's Dalia Rotstein founded NIRVE. As a neurology resident, she modeled NIRVE after the international behavioral neurology rounds, which are sponsored by University of Toronto's Division of Neurology, under the auspices of the Peter A. Silverman Global e-Health Program, CISEPO and Canadian Neurological Sciences Federation. American, Argentinean, Brazilian, Canadian, Chilean, Cuban, Israeli, Jordanian, Palestinian, Russian, South African, Spanish and Swiss (WHO) hospitals have participated in

these rounds. Rotstein envisioned NIRVE as an opportunity for international dialogue while complementing local educational and professional development goals.

NIRVE started in October 2009. Its first members included ABC Foundation School of Medicine, San André, Brazil; State Pavlov Medical University, St. Petersburg, Russia; Jordan University of Science and Technology, Irbid, Jordan; and University of Toronto, Canada. With continuous member feedback, NIRVE grew and succeeded in strengthening its audience's education.

NIRVE not only aims to facilitate exchange of medical knowledge, but to dissipate biases toward foreign cultures and allow understanding of the practice and delivery of medicine in different socio-economical systems. In June 2011, an exchange visit program was initiated. Residents from Brazil, Jordan and Russia traveled to Toronto for a one-week elective. In 2012, Toronto residents visited St. Petersburg, Russia. These rich experiences allowed hosts and guests to further appreciate health care delivery in the societies they serve.

NIRVE provided a platform for mentorship opportunities and leadership development. Many residents acting as local NIRVE coordinators became chief

residents and faculty members. Through NIRVE, they developed skills to become educators in their own right.

Currently in its third year, NIRVE continues to expand as an active international forum and to welcome new connections. Though Jordan and Chile have had to bid farewell to NIRVE, it recently welcomed Ethiopia's Addis Ababa University, Canada's Memorial University and France's Centre Hospitalier Universitaire de Grenoble. Rounds continue on the first Thursday of each month, with a case presentation by a resident from a participating country. Audience members answer knowledge-testing questions as the case unfolds. A short "Image Challenge" section follows, with discussion of a neuroradiology or neuropathology case distributed prior to rounds.

Jenny Tsai took over NIRVE's leadership in 2011. She was assisted in this capacity by her resident colleague, Olga Finlayson, who was succeeded by Mary Jane Lim Fat in 2012. As current leaders of NIRVE, Tsai and Lim Fat incorporate a global and public health component to its curriculum. NIRVE continues to enrich the education of future neurologists and bridges distances for better knowledge transfer in the world of neurology.

If your neurology residency program is



In June 2012, five Toronto residents visited St. Petersburg, Russia, here seen accompanied by Russian residents and Natalya Shuleshova, coordinator of the NIRVE program at the State Pavlov Medical University in St. Petersburg.

interested in learning more about NIRVE, contact nirve.utoronto@gmail.com. •

Mary JaneLim Fat is a first-year resident in the adult neurology residency program of the University of Toronto. Jenny P. Tsai is a fourth-year resident in the adult neurology residency program of the University of Toronto. Tim Patterson is in the Department of Telehealth, Baycrest, Toronto; vice chair, Canada International Scientific Exchange Program; adjunct professor, Al Quds University, Abu Deis, West Bank and York University; and telehealth consultant, Jordan University of Science and Technology. Mark Kinach is in the Department of Telemedicine, St. Michael's Hospital, Toronto. Morris Freedman is in the Department of Medicine, Division of Neurology, Baycrest, Mt. Sinai Hospital, and University of Toronto, at the Rotman Research Institute, Baycrest, Toronto, Canada, and a member of the WFN Education Committee (co-chair, eLearning Task Force). Jenny Tsai and Mary Jane Lim Fat would like to acknowledge the continuing mentorship from Marika Hohol and Morris Freedman, Division of Neurology, University of Toronto and the tireless assistance of NIRVE's technical team led by Tim Patterson from Toronto's Baycrest Hospital, Mark Kinach from Toronto's St. Michael's Hospital and Simon Fortin from Resolve Collaboration.

NCL Research Award: Call for Proposals

The NCL Foundation aims to find a cure against the deadly children's disease Neuronal Ceroid Lipofuscinosis (NCL), also called Batten disease. This metabolic disorder is the most common neurodegenerative disease of childhood and is inevitably fatal. The gradual stages of the suffering are blindness, dementia, epilepsy, loss of speech, paralysis and complete

helplessness.

We invite medical and basic science researchers worldwide to submit innovative clinical oriented or translational basic science projects, which can contribute to finding a cure for juvenile NCL. Scientists from related areas of science including Alzheimer's disease, aging and other lysosomal storage disorders, are particularly encouraged to apply with the aim to

extend the NCL research community in move more efficiently towards a cure for NCL.

Grant monies (100,000 euros) are to be used for a postdoctoral fellowship in order to undertake the research project. In this fashion our goal is to promote the next generation of young NCL research scientists.

The deadline for applications is Oct.

31, 2013. You can download an application form on the foundation homepage at www.ncl-foundation.com.

Please send your application solely via email to: Research@ncl-foundation.com.

If you have questions, please contact: **Dr. Frank Stehr**
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KOPROWSKI*continued from page 13*

continued studies on rabies virus that led to a new vaccine for both humans and animals. With Tadeusz Wiktor and Stanley Plotkin, Koprowski developed the first true modification of the Pasteur vaccine that required only three to four inoculations instead of the 14-21 needed for the standard Pasteur vaccine. The Koprowski tissue culture rabies vaccine is still used today. Koprowski and Wiktor also developed a bait vaccine for foxes based on fusion between rabies antigen and live vaccinia virus that resulted in an almost total eradication of rabies in France and Belgium.

From 1970-1980, Koprowski and colleagues conducted groundbreaking work on fusion of somatic cells and unfertilized mouse eggs, including uptake of the heterologous genome by mammalian spermatozoa and transfer to ova through fertilization. From 1978-1980, Koprowski and associates developed functional monoclonal antibodies directed against colorectal and pancreatic cancer antigens.

After years of vaccine work on polio and rabies, Koprowski was intrigued by the possibility of a viral cause of multiple sclerosis (MS). From 1971-1985, he supervised the Wistar Institute component of a large program project grant at the University of Pennsylvania on the etiopathogenesis of MS, jointly supported by NINDS and the National MS Society. Attempts to isolate a virus involved propagation of cells obtained from more than 24 MS brains and cocultivation, cell fusion and inoculation of multiple rodent species and primates. MS brain cells were also "superinfected" with vesicular stomatitis virus to identify a pseudotype virus. Timely examination of cells in these cultures by the neuropathologist, Yuzo Iwasaki, was problematic then, since many Wistar scientists also required access to the single electron microscope. The suggestion to purchase a second instrument was met with Koprowski's "practical" solution of having Iwasaki simply work at night and sleep during the day. ("Does the electron microscope know what time it is?") Another example of Koprowski's practical nature was the building of an autopsy room at Inghiss House (a chronic care facility in Philadelphia for patients with advanced MS and other neurological diseases that would not improve) for timely access to MS brain tissue without the need for placement in formaldehyde, which otherwise would virtually obviate virus isolation.

After leaving the Wistar Institute, Koprowski became head of the Center for Neurovirology at Thomas Jefferson University in Philadelphia and eventually president of Biotechnology Foundation Laboratories, Inc. In the decade before his death, Koprowski directed his efforts toward the development of biomedical products in plants. He succeeded in producing rabies vaccine in spinach and

antibodies directed against rabies and cancer antigen in tobacco. In collaboration with Polish scientists, he conducted successful clinical trials with hepatitis B vaccine generated in lettuce.

Koprowski was the author or co-author of more than 900 scientific publications, reviews, chapters and books. He was elected to the National Academy of Sciences and the American Academy of Arts and Sciences. He was a fellow of the College of Physicians of Philadelphia, which in 1959 awarded him its Alvarenga Prize. He served as a consultant to the World Health Organization and the Pan American Health Organization. He held foreign membership in the Yugoslav Academy of Arts and Sciences, the Polish Academy of Sciences, the Russian Academy of Medical Sciences, the Polish Institute of Arts and Sciences of America and the Finnish Society of Sciences and Letters.

He received honorary degrees from numerous universities and was the recipient of many honors, including: The Order of the Lion from the King of Belgium, the French Order of Merit for Research and Invention, a Fulbright Scholarship and an appointment as Alexander von Humboldt professor at the Max Planck Institute in Munich.

In 1989, he received both the San Marino Award for Medicine and the Nicolaus Copernicus Medal of The Polish Academy of Sciences in Warsaw. Koprowski also received many honors in Philadelphia, including the Philadelphia Cancer Research Award, the John Scott Award, and in 1990, the most prestigious honor of his home city, the Philadelphia Award. In 1995, Koprowski was awarded the title of Commander of the Order of the Lion of Finland by the President of the Republic of Finland. In 1997, he was awarded the Legion d'Honneur Award from the French government. In 1998, Koprowski was presented with the Great Order of Merit by the President of Poland, for his polio research. In 2000, Koprowski was honored with a reception at Thomas Jefferson University to celebrate the 50th anniversary of the first feeding of the oral polio vaccine; at this reception, he received commendations from the U.S. Senate, the Pennsylvania Senate and Governor Tom Ridge.

In addition to outstanding professional achievements, there are other memorable aspects of Koprowski. Wikipedia defines him as "cheerful" or "merry," descriptors eminently evident in his persona at all times. When he discussed important scientific issues or needed to make decisive financial or other administrative decisions, "HK" or the "Czar," or the "Baron" or merely the "Boss," as many of us affectionately called him, never seemed stressed. A true polyglot with a sophisticated sense of humor, he answered my question about the number of languages he spoke with: "seven, none perfect." This helped to explain why, when a fact became clear, one

of his favorite expressions was "no certain doubt." When considering alternative possibilities in the discussion section of a paper, he preferred "contrariwise" to "on the other hand."

Koprowski was always loyal to his colleagues and associates. His assistant Suzanne Jones, who worked with him for more than 40 years and to whom he referred as the "Boss," had the same respect and genuine affection for Koprowski as did his professional colleagues. He enjoyed people, good meals and wine and always offered his guests a fine Cuban cigar after dinner. At his home, various sweets and fruits followed the entree, and just when you thought dessert was finished, he brought out the chocolate because "no meal is complete without chocolate."

Koprowski was also an accomplished pianist. He began private lessons at the age of 6, and continued at the Warsaw Conservatory of Music, even during medical school at the University of Warsaw. In 1940, he graduated from the St. Cecilia Conservatory in Rome, as a student of Carlo Zecchi. When he lived in Rio de Janeiro, he gave solo concerts and taught piano before finding laboratory work with the Rockefeller Foundation. When he moved to Lederle Laboratories, he continued to study piano for four hands at the Turtle Bay Conservatory in New York.

During his tenure at The Wistar Institute, he gave annual concerts just before the Christmas holidays for the staff and guests, performing difficult works by Brahms, Schubert, Mendelssohn, Mozart and Bach in a manner both beautiful and expressive. At the age of 77, he began composing music. He took composition lessons with Richard Wernick at the University of Pennsylvania and with Pozzi Escot, professor at the New England Conservatory of Music. He composed pieces for several instruments and voice, frequently related to poems and/or stories. He produced five CDs of music, with some pieces performed by a Parisian orchestra and some by members of the Philadelphia orchestra at his 85th birthday party and again five years later. His compositions were also performed on special occasions at private concerts in Philadelphia and abroad. Several of his compositions have already been published. Among my most cherished possessions is the birthday gift of his composition for unaccompanied violin of well developed variations of "Hava Nagila."

Besides music, Koprowski's knowledge of art, literature and language was amazing. His home contained a "gallery" room filled primarily with Flemish paintings, and other rooms with more than 1,000 books, ranging from the classics to detective novels.

Irena, Koprowski's wife of 74 years, died in 2012. He is survived by two sons, five grandchildren and three great-grandchildren.

I have never met another person who was equally at home with medicine, sci-

ence, musical performance and composition, art, literature and language. In the fullest sense of the word, Koprowski was the true embodiment of the "cultivated" man. His creativity and work ethic were extraordinary.

Thomas Mann said that "genius" is "great intellect" or "hard work." Hilary Koprowski exhibited both. His scientific contributions truly left the world a better place than it was before he entered it. We mourn the passing of a mentor, colleague and dear friend. We will miss him dearly. •

UPDATE**Research Group on Neuroethics**

BY PROFESSOR FRANZ GERSTENBRAND

Ethics in neurology are the basis of all practical work as well as for research activities. In a critical analysis of the used ethical principles, it has to be stated that the contemporary ethical laws are missing different religious, traditional and cultural requirements. The contemporary ethics are based on the philosophy of Socrates, Plato and Aristotle, with the incorporation of the Christian philosophy of Saint Augustine and Thomas Aquinas and should be called Western Ethics. But Western Ethics must not be acceptable worldwide.

The ARG Neuroethics decided to found a task force with the aim to harmonize the ethical principles in neurology, including transcultural considerations. Members of the task force include representatives of Buddhism and Hinduism, the Islamic and Mosaic religions and the different Christian communities.

As a continuous activity of the ARG Neuroethics, the organization of teaching courses and informative workshops has to be mentioned. The organizers of neurological congresses and symposia are asked to include special lectures and training courses in the program. The great lack of ethical knowledge in scientific reports about new treatment programs or research projects is a shameful fact and has to be strictly changed. A continuing ethical education is necessary.

The ARG Neuroethics is asking for more active cooperation and for helpful support to follow the education for a better knowledge in ethical thinking and moral responsibility. The aim for a worldwide acceptable basis for ethical principles in modern neurology needs great knowledge and an intensive preparatory work in philosophical, moral and ethical issues. •